

What is claimed is:

1 1. A system for providing flexible message-based communications
2 over a centralized messaging infrastructure, comprising:
3 a controller to process a plurality of symmetric digital voice messages; and
4 a voice message server to centrally transact one or more voice message
5 sessions over a digital data network, comprising:
6 a message queue to transiently store each such digital voice
7 message; and
8 a queue manager to logically interconnect a plurality of devices by
9 routing each transiently stored digital voice message between the interconnected
10 devices.

1 2. A system according to Claim 1, further comprising:
2 a session manager to manage each voice message sessions, comprising:
3 an authentication component to process an operation by at least
4 one such device selected from the group comprising at least one of a sign-in and a
5 sign-out; and
6 a message router to perform store-and-forward processing of the
7 transiently stored digital voice messages.

1 3. A system according to Claim 1, further comprising:
2 a security manager to provide security between the voice message sessions
3 by authenticating each such device into the voice message session.

1 4. A system according to Claim 1, wherein the devices are grouped in
2 a relationship selected from the group comprising one of a one-to-one, one-to-
3 many and many-to-many.

1 5. A system according to Claim 1, further comprising:
2 a session manager to form a plurality of voice message sessions, wherein
3 each such voice message session comprises one or more discussion groups,
4 further comprising:

5 a database manager to associate an identifier selected from the
6 group comprising at least one of a user identifier and a discussion group identifier
7 with each such digital voice message; and
8 a message router to provide logical participation in a plurality of
9 such discussion group through routing the digital voice messages by identifier.

1 6. A system according to Claim 1, further comprising:
2 a storage device to persistently store each such digital voice message.

1 7. A system according to Claim 1, further comprising:
2 a voice processing component to process analog voice into the digital
3 voice messages.

1 8. A system according to Claim 7, further comprising:
2 a speech recognition component to transcribe the digital voice messages
3 using the device.

1 9. A system according to Claim 7, further comprising:
2 a speech recognition component to transcribe the digital voice messages
3 using a proxy voice server interfaced to the device over a voice network.

1 10. A system according to Claim 7, further comprising:
2 a speech recognition component to transcribe the digital voice messages
3 using translation logic integrated into the device.

1 11. A system according to Claim 7, further comprising:
2 a voice communications interface to concurrently transact voice
3 communications over a voice network relative to the voice message session.

1 12. A method for providing flexible message-based communications
2 over a centralized messaging infrastructure, comprising:
3 processing a plurality of symmetric digital voice messages; and

4 centrally transacting one or more voice message sessions over a digital
5 data network, comprising:
6 transiently storing each such digital voice message; and
7 logically interconnecting a plurality of devices by routing each
8 transiently stored digital voice message between the interconnected devices.

1 13. A method according to Claim 12, further comprising:
2 managing each voice message sessions, comprising:
3 processing an operation by at least one such device selected from
4 the group comprising at least one of a sign-in and a sign-out; and
5 performing store-and-forward processing of the transiently stored
6 digital voice messages.

1 14. A method according to Claim 12, further comprising:
2 providing security between the voice message sessions by authenticating
3 each such device into the voice message session.

1 15. A method according to Claim 12, further comprising:
2 grouping the devices in a relationship selected from the group comprising
3 one of a one-to-one, one-to-many and many-to-many.

1 16. A method according to Claim 12, further comprising:
2 forming a plurality of voice message sessions, wherein each such voice
3 message session comprises one or more discussion groups, further comprising:
4 associating an identifier selected from the group comprising at
5 least one of a user identifier and a discussion group identifier with each such
6 digital voice message; and
7 providing logical participation in a plurality of such discussion
8 group through routing the digital voice messages by identifier.

1 17. A method according to Claim 12, further comprising:
2 persistently storing each such digital voice message.

1 18. A method according to Claim 12, further comprising:
2 processing analog voice into the digital voice messages.

1 19. A method according to Claim 18, further comprising:
2 converting analog voice signals into the digital voice messages using the
3 device.

1 20. A method according to Claim 18, further comprising:
2 transcribing analog voice signals into the digital voice messages using a
3 proxy voice server interfaced to the device over a voice network.

1 21. A method according to Claim 18, further comprising:
2 transcribing analog voice signals into the digital voice messages using
3 translation logic integrated into the device.

1 22. A method according to Claim 18, further comprising:
2 concurrently transacting voice communications over a voice network
3 relative to the voice message session.

1 23. A computer-readable storage medium holding code for performing
2 the method according to Claim 12.

1 24. An apparatus for providing flexible message-based
2 communications over a centralized messaging infrastructure, comprising:
3 means for processing a plurality of symmetric digital voice messages; and
4 means for centrally transacting one or more voice message sessions over a
5 digital data network, comprising:
6 means for transiently storing each such digital voice message; and
7 means for logically interconnecting a plurality of devices by means
8 for routing each transiently stored digital voice message between the
9 interconnected devices.

1 25. A system for providing flexible message-based communications
2 with personal communication devices over a centralized messaging infrastructure,
3 comprising:
4 a plurality of personal communication devices to originate digital voice
5 messages comprising digitized voice;
6 a voice message server to communicatively interface to the one or more
7 personal communication devices over a digital data network; and
8 a queue manager to process the digital voice messages, comprising:
9 a receiver to receive each digital voice message from at least one
10 such personal communication device;
11 a message queue to transiently store the digital voice message; and
12 a sender to send the digital voice message to at least one such
13 personal communication device identified in the digital voice message.

1 26. A system according to Claim 25, further comprising:
2 a database manager to interface to a plurality of databases, comprising:
3 a user and discussion group database to store session information;
4 a personal information database to store personal information;
5 a control module to provide an interface authenticating at least one
6 personal communication device against the personal information; and
7 a queue manager to stage each such digital voice message and to forward
8 the digital voice message based on the session information.

9 27. A system according to Claim 25, further comprising:
10 a proxy message server to communicatively interface a personal
11 communication device with the voice message server.

12 28. A system according to Claim 25, further comprising:
13 a cellular telephone to integrate with at least one such personal
14 communication device.

1 29. A system according to Claim 25, wherein the one or more personal
2 communication devices further comprise:

3 a voice message module to digitize the voice messages;
4 a message storage module to store transient voice messages, comprising:
5 a buffer to assemble outgoing voice messages;
6 a message queue to transitorily store the outgoing voice messages;
7 and
8 a message store to persistently store saved voice messages.

1 30. A method for providing flexible message-based communications
2 with personal communication devices over a centralized messaging infrastructure,
3 comprising:

4 originating digital voice messages comprising digitized voice through a
5 plurality of personal communication devices;
6 communicatively interfacing the one or more personal communication
7 devices over a digital data network; and
8 processing the digital voice messages, comprising:
9 receiving each digital voice message from at least one such
10 personal communication device;
11 transiently storing the digital voice message; and
12 sending the digital voice message to at least one such personal
13 communication device identified in the digital voice message.

1 31. A method according to Claim 30, further comprising:
2 interfacing to a plurality of databases, comprising:
3 maintaining a user and discussion group database to store session
4 information;
5 maintaining a personal information database to store personal
6 information;

7 providing an interface authenticating at least one personal communication
8 device against the personal information; and
9 staging each such digital voice message and to forward the digital voice
10 message based on the session information.

11 32. A method according to Claim 30, further comprising:
12 communicatively interfacing a personal communication device with the
13 voice message server through a proxy message server.

14 33. A method according to Claim 30, further comprising:
15 integrating a cellular telephone with at least one such personal
16 communication device.

1 34. A method according to Claim 30, wherein the one or more
2 personal communication devices further comprise:
3 digitizing the voice messages;
4 storing transient voice messages, comprising:
5 assembling outgoing voice messages;
6 transitorily storing the outgoing voice messages; and
7 persistently storing saved voice messages.

1 35. A computer-readable storage medium holding code for performing
2 the method according to Claim 30.

1 36. An apparatus for providing flexible message-based
2 communications with personal communication devices over a centralized
3 messaging infrastructure, comprising:
4 means for originating digital voice messages comprising digitized voice
5 through a plurality of personal communication devices;
6 means for communicatively interfacing the one or more personal
7 communication devices over a digital data network; and
8 means for processing the digital voice messages, comprising:

- 9 means for receiving each digital voice message from at least one
10 such personal communication device;
11 means for transiently storing the digital voice message; and
12 means for sending the digital voice message to at least one such
13 personal communication device identified in the digital voice message.